LEONARD, M. D.

A revision of the dipterous family Rhagionidae (Leptidae), Mem. Am. Ent. Soc. 7, pp. 181+iv, 3 Pls., 1930.

Records 23 species (besides three of *Xylomyia* we refer to the Stratiomyiidae) from our region, only two short of the total of the present list.

LOEW, H.

Diptera americae septentrionalis indigena, Berlin Ent. Zeitschr, 1861, p. 58. *Bolbomyia nana* described from Washington.

OSTEN SACKEN, C. R.

A list of the Leptidae, Mydaidae, and Dasypogonina of North America, Bul. Buffalo Soc. Nat. Sci., 11 (1874–75), p. 173, 1875.

Records Leptis scapularis Lw. (=Rhagio vertebratus) from the District of Columbia.

SHANNON, R. C.

Eastern Symphoromyia attacking man, Proc. Ent. Soc. Wash., 17, No. 4, Dec. 1915, pp. 188-189.

S. hirta various records = S. cinerea.

# ADDITIONAL NOTES ON TYPES WITH DESCRIPTION OF A NEW GENUS (HYMENOPTERA: CYNIPIDAE).

By Lewis H. Weld, East Falls Church, Virginia.

At the Zoological Museum in Lund, Sweden, are preserved the Dahlbom and C. G. Thomson collections of Cynipidae. The Thomson collection occupies two museum drawers and contains about 160 species of which about half are his own species. Nine are types of genera. There are two Dahlbom collections: his "museum" collection in two drawers; and his "private" collection in three small red drawers in a separate cabinet.

Seven of his species are genotypes.

At the Zoological Museum in Berlin the Reinhard collection is distributed in the regular systematic collection as is also material from Mayr, Schlechtendal, Bassett, Kieffer and some of the Förster species. The von Halfern arrangement of Förster Cynipidae occupies 6 drawers in another cabinet and contains many genotype species. There are 6 additional drawers of unworked Förster material, about 17,000 specimens; most of the genotypes have been taken out but many manuscript names occur. Förster founded 64 genera of Cynipidae, 29 on his own species and of these all but one, *Dilyta subclavata*, have been found in the collection. In the regular collection is type material of most of the Hedicke genotype species. At the Deutsch. Ent. Inst. in Dahlem is a collection of about 100 species, 16 of which, including 3 genotypes, are not represented

in the other museum. Including both museums a total of 343

species, including 69 genotypes, will be found in Berlin.

In Vienna the regular collection occupies 119 drawers with 12 more of inserenda. It is richest in gall-making species (544) with 93 parasitic, making a total of 637 of which 66 are genotype species.

The Hartig collection of Cynipidae will be found intact in the Zoologische Staatssamlung in Munich. Thirty-four of his species

are types of genera.

The Giraud collection is in Paris. Of his species 12 are types of genera. As he exchanged with Mayr, Giraud type material will be found in Vienna also. There are 2 Kieffer genotypes at Paris and 3 specimens of Oberthürella lenticularis Saussure which may be the types. The Cameron types are in the British Museum, whose collection totals 268 species of which 53 are genotypes.

Aspicerinae.

#### OMALASPIS Giraud.

Lambertonia Kieffer Bull. Ent. Soc. France 1901: 158-9. Synonymy new.

Omalaspis norica Giraud, the genotype of Omalaspis, was described as having a closed radial cell. The two Giraud types in Paris have the radial cell open on the margin, a condition for which the genus Lambertonia seems to have been erected. The type of Lambertonia abnormis Kieffer, the genotype, has not been seen nor is its present location known to me, but there seems to be nothing in the published description that would prevent its being congeneric with norica and prevent Lambertonia from becoming a synonym of Omalaspis.

Figitinae.

#### ZYGOSIS Förster.

Diceraea Förster Verh. Zool.-Bot. Ges. Wien 19: Abh. pp. 364, 367. Synonymy new.

In the Dahlbom "museum" collection in Lund were found 18 specimens of Figites urticeti Dahlb., the genotype of Diceraea, and one of these was selected as a lectotype. Förster established the genus *Diceraea* on the characters "eyes bare and first abscissa of subcosta obsolete," but the type specimens have the eyes hairy, the subcosta normally developed, the two sides of the areolet distinct and all pleurae and scutellum smooth so that they run to Zygosis in Förster's own key. The basal region of the subcosta which Dahlbom failed to see is slender but is

distinctly present and the membrane in front of it is very

transparent.

Through the courtesy of Dr. N. A. Kemner one of the specimens from the Dahlbom "museum" collection was taken to Berlin and compared with a specimen of *Psilogaster heteropterus* Hartig on which Förster founded the genus *Zygosis* and the two were found to be not only congeneric but to be the same species. Later it was compared directly with the Hartig type of *heteropterus* at Munich and this conclusion was confirmed. I conclude that *Psilogaster heteropterus* Hartig, 1843, is a synonym of *Figites urticeti* Dahlbom, 1842 (Synonymy new), and that *Zygosis urticeti* (Dahlbom) is the valid name of the species. *Diceraea* becomes a synonym of *Zygosis* which has page precedence in Förster's key erecting these two new genera.

Anacharitinae.

#### CALOFIGITES Kieffer.

This monobasic genus was described in the Figitinae. The type of *Calofigites nitidus* Kieffer in Berlin lacks the head and the pin goes through the mesoscutum, but the habitus and particularly the heavy veins of the radial cell and the structure of the scutellum lead me to the conclusion that the genus belongs in the Anacharitinae.

### ACANTHEUCOELA Ashmead.

Gonieucoela Kieffer, 1907, Ent. Ztschr. Stuttgart 21:112. Synonymy new.

After studying the type of the genotype species, Gonieucoela bilobata Kieffer, in Pomona College and Gonieucoela brevidens Kieffer in Berlin and paratypes of both now in the U. S. N. M. I conclude that the differences between this genus and Acantheucoela (in the sculpture of the posterior part of the disk of the scutellum) are too trivial to warrant maintaining Gonieucoela as a separate genus. The genus Acantheucoela was not familiar to Kieffer, who included it in Das Tierreich as an unnumbered genus. It was described from Cuba and has been found in Montserrat, Mexico, Brazil, and Bolivia. The two species of Gonieucoela are from Belize, Nicaragua, Peru and Bolivia.

Eucoilinae.

#### EUCOILA Westwood.

Lytosema Kieffer, 1901, Feuille Natural. 31:159, 162. Synonymy new.

Ashmead and more recently Hedicke have published that the

genotype of *Eucoila* Westwood (not of authors) is a species with bare, non-ciliate wings and that *Psilodora* Förster is a synonym of it, its genotype being congeneric with *Eucoila crassinerva* Westwood.

An examination of the Dahlbom collection in Lund showed that *Eucoila guerinii* Dahlbom, the genotype of *Lytosema*, is also congeneric with *crassinerva* Westwood and therefore

Lytosema should become a synonym of Eucoila.

Guerinii was species number 19 in Dahlbom's table published in 1842 in which the species was figured and the radial cell shown as open. No specimen bearing the name of Eucoila guerinii appears in the Dahlbom collection however. In 1846 he published a key to Eucoila in which the same number of species occurs and all are the same as in the former paper except that number 19 is here called *scutellaris* and specimens with this name do occur in both his "private" and in his "museum" collections and on one pin the name "Guerin" is written underneath scutellaris. He appears to have renamed the species for some reason in 1846 and this has been the Dalla Torre and Kieffer interpretation. These specimens of scutellaris agree with the figures of guerinii except that I should call the radial cell closed and should put it in Psilodora Förster, the only distinction Dalla Torre and Kieffer make between Lytosema and Psilodora being the open or closed cell. It seems therefore that Lytosema should go into synonymy and if species are ever found in this bare and non-ciliate winged group with a radial cell that is actually open a new name can be proposed for them if thought desirable.

#### BOTHROCHACIS Cameron.

Salpictes Kieffer, 1913, Voyage de Alluaud Hym. 1:31. Synonymy new.

The female holotype of the genotype species, Salpictes rufiventris Kieffer, is in Paris and when dirt was cleared away from the scutellum the disk was found to be coarsely punctate and truncated behind, the truncated end being slightly hollowed out. There seems to be nothing to separate this from Bothrochacis Cameron, a genus with which Kieffer was not familiar and which was described from males only.

#### KLEIDOTOMA Westwood.

Schizosema Kieffer, 1901, Feuille Natural, 31:158, 161. Synonymy new.

Kieffer founded this genus for two species, Cothonaspis

emarginatus Hartig which was described as having "abdomen basi denudatum" and Pentacrita proxima Ashmead, whose abdomen was said to be without a ring of hairs at the base. The Hartig holotype male of emarginatus at Munich has a hairy ring at base of second tergite and the characteristic wing venation, striate disk, and narrow cup of Kleidotoma although the obliquely truncate wing can hardly be called emarginate. As it is the genotype of Schizosema this genus becomes a synonym of Kleidotoma. The type of proxima Ashmead has not been examined; it is probably in the British Museum.

#### EUTRIAS Förster.

The types of the genotype species, Eucocla tritoma Thomson at Lund, 5 females and 2 males, have the disk of the scutellum distinctly longitudinally striate, tapering to a blunt triangular point behind the very narrow cup. The wing is very transparent, its surface dotted but bare in the female and with short pubescence in the male. In the male the margin of the fore wing is ciliate but only one of the five females shows any cilia on the margin. The wing is not truncate or emarginate but normally rounded at the end. It seems to me that Dalla Torre and Kieffer are in error in Das Tierreich, Lief. 24:111 (1910) in making Eutrias a subgenus of Cothonaspis. It is more closely related to Rhynchacis from which it is separated by the normally rounded wings or to Eucoila Westwood (not of authors) (= Psilodora) from which it is separated by the narrow cup and striate disk. It seems better to maintain it as a separate genus.

Cynipinae.

# Diplolepis centricola (O S).

Cynips quercus-rubrae Karsch, 1880, Zeit. f. Naturw. 53: 293, Pl. 6, fig. 4, a, b. Synonymy new.

I have compared the two types of quercus-rubrae in the Berlin Museum with determined specimens of centricola reared from centricola galls on post oak at Washington, D. C., the type locality, and find that they are the same. The Karsch galls agree with the centricola galls from Quercus stellata and I conclude that Karsch redescribed the species which Osten Sacken had described in 1863.

# Amphibolips spongifica (O S).

Trissandricus maculipennis Kieffer, 1910, Boll. Laboro. Zool. Portici 4: 115. Synonymy new.

The four types of *maculipennis*, on which Kieffer founded the genus *Trissandricus*, in the Berlin Museum, belong to the genus *Amphibolips*, an American genus with which Kieffer does not

seem to have been familiar. Through the courtesy of the Berlin Museum one of the paratypes was secured by exchange for the U. S. National Museum. It agrees in structure with spongifica and certain specimens in a series of spongifica reared at East Falls Church, Va., but a few miles from the type locality, agree with it in color; others have the thorax black like the head and are distinctly bicolored. I conclude that both the genus and species should disappear in synonymy.

## Callirhytis corrugis (Bassett).

Callirhytis defecta Kieffer, 1910, Boll. Laboro. Zool. Portici 4:416. Synonymy new.

One of the two types of *defecta* in the Berlin Museum has both antennae 14-segmented; the other has 14 on one side and 13 on the other with a trace of subdivision on one side of the terminal segment. Through the courtesy of the Berlin Museum one of these was loaned in order that it might be compared directly with the holotype of *Cynips corrugis* Bassett in the Acad. Nat. Sci. in Philadelphia. The antennae of *corrugis* exhibit the condition found in one of the types of *defecta*, namely 14-segmented on one side and 13-segmented on the other. There seemed to be no difference in sculpture and I conclude that

defecta is a synonym of corrugis.

I have taken what seems to be this species ovipositing in the buds of *Quercus velutina* at Washington, D. C., April 20, 1924, and at East Falls Church, Va., on April 18, 19, 20, 1927, April 19, 1928, and April 22, 1930. Some of these have 13-segmented antennae and others 14. Specimens have been compared directly with the type of *defecta* and with the type of *corrugis* and I should consider them all one species. They oviposit on the side of the elongating buds about midway of their length when the buds are from one-half to three-quarters of an inch long, selecting usually the topmost buds on vigorous shoots from stumps. The gall from which they have emerged has not yet been discovered nor has the alternating gall which they produce.

Through the courtesy of the Berlin Museum I am able to describe the following new genus in the Eucoilinae recognized among undetermined material.

## PERISCHUS n. g.

This genus and Zamischus Ashmead are separated from all the rest of the known Eucoilinae by having a remarkably long and slender body, both the neck of the propodeum and the petiole of the abdomen being unusually elongated. Both have the head massive, broader than the thorax, the antennae arising far above the middle of the eyes, the lateral bars at base of scutellum broad and striate, the mesopleurae aciculate, the wings pubescent and ciliate, and the

second tergite bare at the base. Both are neotropical. *Perischus* (name from *peri* and *Zamischus*) differs in having filiform antennae, the neck of the propodeum not reaching as far back as the distal end of hind coxae, a closed radial cell and a transversely sculptured mesoscutum.

Genotype.—Perischus boliviensis which is described below. Monobasic.

## Perischus boliviensis n. sp. (Fig. 1).

Female.—Black; mandibles, tibiae and tarsi reddish-brown. Head smooth and polished with a few setigerous punctures on face; from above the axial line .65 transfacial, cheeks not broadened behind the eyes, not margined; from in front broader than high, interocular space .47 transfacial and area .9 as broad as high, malar space .4 eye with a fine malar groove, clypeal area higher than broad. Antennae arising high on face, filiform, as long as body, 13-segmented, lengths as (scape) 12 (width 4.5):6:21 (3):23:24:25:24:22:20:18:18:18:20 (4), the third seen from above slightly bent inward, all flagellar segments cylindrical and closely joined. Sides of prothorax produced backward, mostly smooth but striate below, the truncation .4 width of head and not quite half the width of thorax, with deep lateral indentations, shallowly emarginate above.

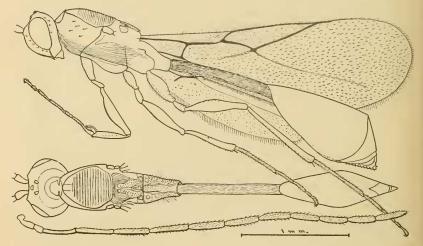


Fig 1. Perischus boliviensis n. sp. Lateral view, dorsal view and antenna.

Mesoscutum somewhat triangular, longer than broad, shining, with about 20 fine sharp transverse ridges, smoother anteriorly where are fine anterior parallel lines, without trace of parapsidal grooves. Scutellum .6 as long as mesoscutum with two small smooth pits at base and broad striate lateral bars, the disk punctate, rounded behind, faintly margined, the cup but slightly elevated, tapering in front into a long polished septum between the pits, its surface flat

with coarse confluent punctures, over three times as long as broad, not quite reaching end of disk. Mesopleurae much elongated and separating the middle coxae far from anterior, longitudinally striate, smoother below, the mesosternum with a fine median carina. Metapleurae also striate. Propodeum longer than scutellum, not as long as width of head, its neck with two prominent carinae dorsally, the sides rugose and pubescent. Wings clear but the pubescence and cilia dark like the veins, radial cell closed, 4.8 times as long as broad, the marginal vein prolonged beyond apex of radial cell, cubitus partly formed, areolet absent. Legs long and slender; segments of front leg as (coxa) 18:9:38:26:61 (= 26 + 13 + 9 + 5 + 8; of hind leg as (coxa) 29(9) : 9 : 43 : 61 : 84 (= 42 + 17 + 12)+5+8); claws fine, simple. Petiole cylindrical, slightly carriate on sides, dull, longitudinally striate, 11.5 times as long as broad, shorter than rest of abdomen, which is somewhat compressed laterally, second tergite largest, bare at base, without punctures; lengths of tergites along dorsal curvature as (petiole) 69 (6): 73:26:2:9. Using the width of the head as a base the length of mesonotum ratio is 1.4, wing 5.1, antenna 6.1. Length 3.5 mm. Antenna 3.55 mm. Wing 2.95 mm.

Described from two specimens from Coroico, Bolivia. Type and paratype in the Zoological Museum in Berlin. Wing, antenna and legs from one side of the type in balsam on slide in U. S. N. M.

# A NEW SPECIES OF TERMITE, RETICULITERMES ARENIN-COLA, FROM THE SAND DUNES OF INDIANA AND MICHI-GAN, ALONG THE SHORES OF LAKE MICHIGAN.

By Eugene J. Goellner, Department of Zoology, University of Chicago.

The eastern species of termite, Reticulitermes flavipes Kollar, had been always considered to occur in the Indiana dunes along the southern shore of Lake Michigan. In 1929 Park<sup>1</sup> reported the western species, Reticulitermes tibialis Banks, from this region. A study of the distribution of these two species of termites was undertaken in the fall of 1930. At the very outset of the investigation, the species considered in the past as Reticulitermes flavipes Kollar exhibited such morphological differences from the eastern species as to warrant describing it as a new species.

According to present knowledge, Reticulitermes arenicola sp. n. appears to be typically an inhabitant of sandy places. It occurs side by side with Reticulitermes tibialis Banks in the

Indiana sand dunes.

A few records of it were obtained from the dunes of Western Michigan, from the Indiana border to New Buffalo, at Stevens-

<sup>&</sup>lt;sup>1</sup>The author is indebted to Dr. Alfred E. Emerson of the University of Chicago, under whom the work was done, and to Dr. T. E. Snyder of the U. S. Department of Agriculture.